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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
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| 09/640,349  | 08/16/2000  | Karen M. Schramm     | IBN.5192              | 3369             |
| 24739   | 7590        | 12/29/2004           | EXAMINER              |                  |
| CENTRAL COAST PATENT AGENCY<br>PO BOX 187<br>AROMAS, CA 95004 |             |                      | VANDERPUYE, KENNETH N |                  |
|   |             |                      | ART UNIT              | PAPER NUMBER     |
|   |             |                      | 2661                  |                  |

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/640,349

**Applicant(s)**

SCHRAMM ET AL.

**Examiner**

Kenneth N Vanderpuye

**Art Unit**

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed with RCE have been fully considered but they are not persuasive.

The applicants arguments regarding the examiners rejection is two fold.

With regard to the first argument, the applicant argues that Sriram fails to teach ... "assigning a queue value to each of the plurality of queues, each of said queue values being related to preference for transferring data from its assigned queue onto the link...", the examiner respectfully disagrees. The queues in Sriram are priority queues and are classified(Type 1A, 1B, 2, 3) according to tolerable delay(Fig. 4). Hence the preference for transferring data from the queues onto the link is related to the data with the least tolerable delay. In Fig. 5, the queues are arranged from least to most tolerable delay. The classification of the queues is tantamount to assigning a queue value.

With regards to the second argument, applicant argues that Sriram fails to teach ... "assigning a data limit value to each of the plurality of queues... and each of said data limit values derived from the bandwidth of

the at least one link. The examiner respectfully disagrees. With respect to figure 5 it is shown that the link bandwidth or data rate is 150Mb/s. That is, it is the maximum data rate that can be supported by the link. Each queue has a data limit that is derived from the link bandwidth limit(col. 6 lines 45-62). It is derived from the link bandwidth because the time slice server cannot select cells from queues to exceed the bandwidth limit of the link. Sriram therefore teaches both limitations.

The rejection in the previous office action is hereby maintained.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title; if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sriram(5,463,620) in view of Kalkunte et al(6,470,016).

With regards to claims 1, 7, Sriram teaches an apparatus for controlling data traffic at a node on a network, comprising:

an output interface coupled to at least one link on the network for transferring data toward the at least one link(Fig. 5@48, Fig. 6@50), the at

least one link being associated with a bandwidth value related to a maximum amount of data to be transferred on the link(Fig. 5@28, 150 Mb/s); a plurality of queues for storing data transferred via the output interface(Fig. 5, queues 36-46); and at least one processor for (i) assigning a queue value to each of the plurality of queues,(Fig. 6@52, 54, each of the queues are assigned a bit rate) each of said queue values being related to a preference for transferring data from its assigned queue onto the link(Fig. 5, the bit rate assigned to each queue is related to the type of data being transmitted), and (ii) assigning a data limit value to each of the plurality of queues such that an amount of data being transferred onto the link from each queue is limited by the data limit value assigned to the queue(Fig. 5, each queue has a transmission bit rate limit), each of said data limit values being derived from the bandwidth value for the at least one link.(Fig. 5, the total bit rate of all the queues is equal to the total capacity of the link). What sriram fails to teach is wherein if one of the plurality of queues has no data traffic, said queues data traffic capacity is allocated among other queues. The limitation is taught by Kalkunte(Fig. 7, col. 6 lines 30-37, col 7 lines 51-67). It would have been obvious to combine Sriram with Kalkunte for the

purpose of reallocating bandwidth to queues that have data to send. The motivation being to ensure the efficient distribution of bandwidth.

Claims 2, 8 are rejected because Sriram teaches a system wherein the queue values assigned by the at least one processor are priority values, each priority value defining a priority for transferring data stored in the associated(In Fig. 5, the bit rates are related to the delay sensitivity of the data in the different queues which is a measure of priority)

Claims 3, 9 are rejected because the bit rates of each queue is a fraction of the total link bandwidth, hence a percentage.

Claims 4, 10 are rejected because the terms percentages weights etc produce the same result i.e. the assigned priorities reflect the delay sensitivity of the data being sent hence these values are weighted.

Claims 5, 11 are rejected for the same reasons as claims 3, 9.

Claims 6, 12 are rejected for the same reasons as claims 3, 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth N Vanderpuye whose telephone number is 703-308-7828. The examiner can normally be reached on M-F(7:30-5:00) Second Friday Off.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



KENNETH VANDERPUYE  
PRIMARY EXAMINER

KNV  
12/3/04